In the Claims:

Claims 1. – 173. (Canceled).

174. (NEW) An apparatus for generating micro-organs from a tissue biopsy and for administering the micro-organs into a subject, the apparatus comprising:

(a) a cutting chamber for cutting the tissue biopsy into a plurality of micro-organs; and

(b) an implanting mechanism for administering the plurality of micro-organs into the subject, said implanting mechanism being operably coupled to said cutting chamber.

175. (NEW) The apparatus of claim 174, further comprising a viability testing chamber operably coupled to said cutting chamber for testing a viability of at least one sacrificial micro-organ of said plurality of micro-organs.

176. (NEW) The apparatus of claim 174, wherein said implanting mechanism comprises a multi-channel implanter and corresponding advancing elements for advancing said plurality of micro-organs from said cutting chamber to said multi-channel implanter and further for administering the plurality of micro-organs into the subject.

177. (NEW) The apparatus of claim 174, further comprising a processing chamber being operably coupled to said cutting chamber and said implanting mechanism for processing said micro-organs prior to said administering.

178. (NEW) The apparatus of claim 174, wherein said cutting chamber is designed and constructed such that once the tissue biopsy is cut into said plurality of micro-organs, each of said micro-organs such that cells positioned deepest within a micro-organ of said plurality of micro-organs are at least about 80 - 100 microns and not more than 225-375 microns away from a nearest surface of said micro-organ.

179. (NEW) The apparatus of claim 174, wherein said cutting chamber comprises a cutting mechanism having a plurality of blades movable to cut the tissue biopsy into said plurality of micro-organs.

180. (NEW) The apparatus of claim 179, wherein said blades are so disposed with respect to one another such that once the tissue biopsy is cut into said plurality of micro-organs, each of said micro-organs such that cells positioned deepest within a micro-organ of said plurality of micro-organs are at least about 80-100 microns and not more than 225-375 microns away from a nearest surface of said micro-organ.

181. (NEW) The apparatus of claim 174, wherein said implanting mechanism comprises a syringe-operated micro-forceps, inserted within a hyperemic needle of said syringe, said hyperemic needle being operative for administering the micro-organs into the subject.

182. (NEW) The apparatus of claim 181, wherein said syringe-operated micro-forceps is further operative for removing the micro-organs from said apparatus and into said hyperemic needle.

183. (NEW) An apparatus for generating micro-organs from a tissue biopsy, the apparatus comprising:

(a) a cutting chamber for cutting the tissue biopsy into a plurality of micro-organs; and

(b) a viability testing chamber operably coupled to said cutting chamber for testing a viability of at least one sacrificial micro-organ of said plurality of micro-organs.

184. (NEW) The apparatus of claim 183, wherein each of said plurality of blades has a translatable angled cutting edge.

185. (NEW) The apparatus of claim 183, wherein each of said plurality of blades is a rotatable disc-blade.

186. (NEW) An apparatus for generating micro-organs from a tissue biopsy, the apparatus comprising:

(a) a cutting chamber for cutting the tissue biopsy into a plurality of micro-organs;

(b) a processing chamber being operably coupled to said cutting chamber for processing said micro-organs; and

(c) an advancing mechanism for advancing said micro-organs from said cutting chamber into said processing chamber.

187. (NEW) A method of generating micro-organs from a tissue biopsy comprising:

providing an apparatus which comprises:

(a) a cutting chamber for cutting the tissue biopsy into a plurality of micro-organs; and

(b) an implanting mechanism for administering the plurality of micro-organs into the subject, said implanting mechanism being operably coupled to said cutting chamber; and

placing the tissue biopsy is said cutting chamber and cutting the tissue biopsy into the plurality of micro-organs.

188. (NEW) The method of claim 187, wherein the micro-organs are operable as angiopumps.

189. (NEW) The method of claim 187, wherein said apparatus further comprises a viability testing chamber operably coupled to said cutting chamber for testing a viability of at least one sacrificial micro-organ of said plurality of micro-organs, the method further comprising testing said viability of said at least one sacrificial micro-organ of said plurality of micro-organs prior to using said implanting mechanism for administering the plurality of micro-organs into the subject.

190. (NEW) A device for micro-organ preparation and delivery, comprising:

a tissue cutter, for cutting a tissue biopsy into a plurality of fragments, forming a plurality of micro-organs: and

at least one implanting device, detachably coupled to said tissue cutter, for receiving a micro-organ, of said plurality of micro-organs, when coupled to said tissue cutter, and for implanting said micro-organ into a subject, after decoupling from said tissue cutter.

191. (NEW) The device of claim 190, further comprising a tissue scraper, for obtaining said tissue biopsy.

192. (NEW) The device of claim 191, wherein said tissue scraper is adapted for preparing said tissue biopsy to a predetermined parameter, selected from the group consisting of a width, a length, and a thickness.

193. (NEW) The device of claim 191, wherein said tissue scraper has a replaceable blade.

194. (NEW) The device of claim 190, wherein said device is sealed within a base, a ramp, and a casing.

195. (NEW) The device of claim 190, wherein said device includes a control system.

196. (NEW) The device of claim 190, wherein said device includes at least one automated travel mechanism for transferring the tissue biopsy from one region of said device to another.

197. (NEW) The device of claim 190, wherein said device includes a washing apparatus for rinsing the tissue biopsy.

198. (NEW) The device of claim 197, wherein said washing apparatus is further operative for applying a medium to the tissue biopsy.

199. (NEW) The device of claim 190, wherein said device is further operative as a tissue treatment chamber.

200. (NEW) The device of claim 190, wherein said tissue cutter comprises a plurality of parallel, surgical-grade blades, designed to cut the tissue biopsy into said plurality of fragments, forming said micro-organs, such that cells positioned deepest within any one of said micro-organs are at least about 80 – 100 microns and not more than about 225 - 375 microns away from a nearest surface.

201. (NEW) The device of claim 190, wherein said tissue cutter comprises a plurality of parallel surgical-grade blades, arranged at an angle to the tissue biopsy.

202. (NEW) The device of claim 190, wherein said tissue cutter comprises a plurality of parallel surgical-grade blades, arranged as rotatable disc-blades.

203. (NEW) The device of claim 190, wherein said device comprises a viability testing chamber for testing a viability of at least one micro-organ of said plurality of micro-organs.

204. (NEW) The device of claim 190, wherein said tissue cutter is operative to cut the tissue biopsy, to form said micro-organs, and to arrange each of said micro-organs on a single guide of a plurality of guides, in a single operation.

205. (NEW) The device of claim 203, wherein said at least one implanting device includes a slim housing, adapted for percutaneous insertion, and operable to receive one of said plurality of guides.

206. (NEW) The device of claim 203, wherein said at least one implanting device includes a plurality of implanting devices, each operable to receive one of said plurality of guides.

207. (NEW) A method for micro-organ preparation, comprising:

employing a device for micro-organ preparation and delivery, which includes:

a tissue scraper, for obtaining a tissue biopsy;

a tissue cutter, for cutting the tissue biopsy into a plurality of fragments, forming a plurality of micro-organs: and

at least one implanting device, detachably coupled to said tissue cutter, for receiving a micro-organ, of said plurality of micro-organs, when coupled to said tissue cutter, and for implanting said micro-organ into a subject, after decoupling from said tissue cutter;

scraping the tissue biopsy, with said tissue scraper;

cutting the tissue biopsy to said plurality of fragments, forming said plurality of micro-organs, with said tissue cutter;

mounting said micro-organ, of said plurality of micro-organs, on said at least one implanting device; and

decoupling said at least one implanting device.

208. (NEW) The method of claim 207, wherein said device includes at least one automated travel mechanism for transferring the tissue biopsy from one region of said device to another.

209. (NEW) The method of claim 207, wherein the tissue biopsy is derived from a tissue or organ selected from the group consisting of lung, liver, kidney, muscle, spleen, skin, heart, lymph node and bone marrow.

210. (NEW) The method of claim 207, wherein said cutting includes cutting the tissue biopsy into said plurality of fragments, forming said micro-organs, such that cells positioned deepest within any one of said micro-organs are at least about 80 microns and not more than about 375 microns away from a nearest surface.

211. (NEW) The method of claim 207, wherein said cutting includes cutting the tissue biopsy into said plurality of fragments, forming said micro-organs, such that cells positioned deepest within any one of said micro-organs are at least about 100 microns and not more than about 225 microns away from a nearest surface.

212. (NEW) The method of claim 207, wherein said tissue biopsy is a split-thickness tissue biopsy.

213. (NEW) A micro-forceps comprising:

an elongated body, which defines an overall cross-sectional diameter of between 0.3 and 5 mm and proximal and distal ends, with respect to a target, said elongated body comprising:

two lips, at said proximal end, defining a clearance between them; and

a diametric increase, in the overall cross-sectional diameter, along said elongated body, adapted to force said two lips against each other, when a lateral force in the proximal direction is applied to said diametric increase.

214. (NEW) The micro-forceps of claim 213, wherein said diametric increase is a fold along at least one of said lips.

215. (NEW) The micro-forceps of claim 213, wherein said diametric increase is an incline along at least one of said lips.

216. (NEW) The micro-forceps of claim 213, adapted for operation with a syringe, into which said elongated body may be inserted, wherein said syringe has an internal diameter that is smaller than said diametric increase, said syringe further having a piston fixedly attached to said distal end of said elongated body, so that as said piston is drawn into said syringe, a lateral force in the proximal direction is applied to said diametric increase, by said syringe, forcing said lips to close and grip said target.

217. (NEW) The micro-forceps of claim 216 and further including a hyperemic needle, into which said elongated body may be inserted, wherein said hyperemic needle has an internal diameter that is smaller than said diametric increase, and wherein said hyperemic needle, manipulated by said syringe, is operative for applying said lateral force in the proximal direction, to said diametric increase, forcing said lips to close and grip said target.

218. (NEW) The micro-forceps of claim 213, adapted for operation with a catheter, into which said elongated body may be inserted, wherein said catheter has an internal diameter that is smaller than said diametric increase, and wherein said catheter applies said lateral force in the proximal direction to said diametric increase, forcing said lips to close and grip said target.